BLASTX ALIGNMENT OF (IDENTIFIED AS LRR PROTEIN-LIKE) SEQ D NO: 4 WITH HUMAN GARP PROTEIN PRECURSOR PROTEIN SEQ LEUCINE-RICH REPEAT PROTEIN-LIKE POLYPEPTIDE

NO: 19

Sbjct: Human Garp protein precursor protein gi|5031707 ref|NP 005503.1| glycoprotein A repetitions predominant precursor; garpin >sp|Q14392|GARP_HUMAN GARP PROTEIN PRECURSOR (GARPIN) >pir||S42799 garp precursor - human emb|CAA80847.1| (Z24680) garp [Homo sapiens] (SEQ ID NO: 19) Query: Leucine-rich repeat-like protein (SEQ ID 4)

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Score = 822 (289.4 bits), Expect = 4.9e-81, P = 4.9e-81 Identities = 245/637 (38%), Positives = 328/637 (51%)
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                                                        Query:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               267 CKLVGGAADCRGQSLASVPSSLPPHARMLTLDANPLKTLWNHSLQPYPLLESLSLHSCHL 446
                                                                                                                                                                                                                                                                                                                                                                                                                                         SL ++SLA N++ RL F + L +LDL N + +IE GAF+GL L HLNL+ 146 GEAPSLHTLSLAENSLTRLTRHTFRDMPALEQLDLHSNVLMDIEDGAFEGLPRLTHLNLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  447 ERISRGAFQEQGHLRSLVLGDNCLSENYEETAAALHALPGLRRLDLSGNALTEDMAALML 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             627 QNLSSLRSVSLAGNTIMRLDDSVFEGLERLRELDLQRNYIFEIEGGAFDGLAELRHLNLA 806
                                                                                                              319
                                                                                                                                                                                                                           266
                                                                                                                                                                                                                                                                               984
                                                                                                                                                                                                                                                                                                                                   206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CK+V C+ L VPS LPP L L N L+++ L Y L L L + + 26 CKWVDKKVSCQVLGLLQVPSVLPPDTETLDLSGNQLRSILASPLGFYTALRHLDLSTNEI 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              + GAFQ HL L L N L+ +A L LP + LDLSGN+L + +L
86 SFLQPGAFQALTHLEHLSLAHNRLAMATALSAGGLGPLPRVTSLDLSGNSLYSGLLERLL 145
                                                        HLAPGLASCLGSLRLFNLSSNQLLGVPPGLFANARNITTLDMSHNQISLCPLPAASDRVG 1520
                                                                                                            LD+S N+ + +PD FL + SL LNL +NCL T R L LDLSHN L L
NLDLSYNEIELIPDSFLEHLTSLCFLNLSRNCLRTFEARRLGSLPCLMLLDLSHNALETL
                                                                                                                                                                FLDMSQNQFQYLPDGFLRKMPSLSHLNLHQNCLMTLHIREHEPPGALTELDLSHNQLSEL 1340
                                                                                                                                                                                                                    +L L L NN+ R T P++ +G + ++ S S L+ L RLIYLNL-SNNL--IR--LPTGPPQDSKGIHAPSEGWSALPLSAPS--GNASGRPLSQLL 318
                                                                                                                                                                                                                                                                                                                              FNNLPCIVDFGLTRLRVLNVSYNVLEWF-LATGGEAAFELETLDLSHNQLLFFPLLPQYS 983
N+L CI DF L +LRVL++S N +E F A+ +A F+L LDL N+LL FP L
RNSLTCISDFSLQQLRVLDLSCNSIEAFQTASQPQAEFQLTWLDLRENKLLHFPDLAALP 265
                                                                                                                                                                                                                                                                          KLRTLLLRDNNMGFYRDLYNTSSPREMVAQFLLVDG-NVTNITTVSLWEEFSSSDLADLR 1160
L A LGSLR L N L +PP FAN ++ L++ N++S C P D G
ELG---ARALGSLRTLLLQGNALRDLPPYTFANLASLQRLNLQGNRVSPCGGP---DEPG 432
                                                                                                                                       378
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Fig. 1A

BLASTX ALIGNMENT OF SEQ ID NO: 4 (IDENTIFIED AS LRR PROTEIN-LIKE) WITH HUMAN GARP PROTEIN PRECURSOR PROTEIN SEQ LEUCINE-RICH REPEAT PROTEIN-LIKE POLYPEPTIDE

Sbjct: Sbjct: Query: Query: Sbjct: Sbjct: Query: Query: 1521 PPSCVDFRNMASLRSLSLEGCGLGALPDCPFQGTSLTYLDLSSNWG--VLNGSLAPLQDV 1694
P CV F + SLRSLSL + L F T LT LDLSSN G V G+L L+
433 PSGCVAFSGITSLRSLSLVDNEIELLRAGAFLHTPLTELDLSSNPGLEVATGALGGLE-- 490 1695 APMLQVLSLRNMGLHSSFMALDFSGFGNLRDLDLSGNCLPIFPRFGGSLALETLDLRRNS 1874
L+VL+L+ GL + +D F L+ L+L+ N L P + +++LE LDLR NS
491 -ASLEVLALQGNGL--MVLQVDLPCFICLKRLNLAENRLSHLPAWTQAVSLEVLDLRNNS 547 1875 LTALPQKAVSEQLSRGLRTIYLSQNPYDCCGVDGWGALQ-H-GQTVADWAM-VTCNLSSK 2045 + LP A+ L LR +YL NP CCG +GW A Q H G+ D + C SS+ 548 FSLLPGSAMGG-LETSLRRLYLQGNPLSCCG-NGWLAAQLHQGRVDVDATQDLICRFSSQ 605 2046 IIRVTELPGGVPRDCKWERL-DLGLLY-LVLILPSC--LTLLVACTVI 2177 L P DC+ L ++ L+ L IL S LT L AC + 606 --EEVSLSHVRPEDCEKGGLKNINLIIILTFILVSAILLTTLAACCCV 651

FIG. 1B

BLASTX ALIGNMENT OF SEQ ID PROTEIN COMPLEX ACID LABILE SUBUNIT PROTEIN (IDENTIFIED AS LRR PROTEIN-LIKE) WITH HUMAN INSULIN-LIKE GROWTH FACTOR NO: 4 LEUCINE-RICH REPEAT PROTEIN-LIKE POLYPEPTIDE O 国 S ID NO: BINDING

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Query: Leucine-rich repeat-like protein (SEQ ID 4)
Sbjct: Human sp|002833|ALS_PAPPA insulin-like growth factor binding protein complex acid labile chain precursor
>pir||JC5239 insulin-like growth factor acid-labile chain - baboon (SEQ ID NO: 20)
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Score = 294 (103.5 bits), Expect = 1.1e-21, P = 1.1e-21
Identities = 158/510 (30%), Positives = 228/510 (44%)
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                                                                                                                                        Query:
1440 ARNITILDMSHNQISLCPLPAASDRVGPPSCVDFRNMASLRSLSLEGCGLGAL 1598
+ LD+SHN++ P + +G ++ RN SLR+ + + GL L
481 LQRAFWLDVSHNRLEALPGSLLAS-LGRLRYLNLRNN-SLRTFTPQPPGLERL 531
                                                                                                                                        1260 MTLHIREHEPPGALTELDLSHNQLSELHLAPGLASCLGSLRLFNLSSNQLLGVPPGLFAN 1439
                                                                                                                                                                                                                                      1086
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+ p L L L + L R+ G F+ G+L L LG N L+ + AA L
AVGTFAYTPALALLGLSNNRLSRLEDGLFEGLGNLWDLNLGWNSLAVLPD---AAFRGLG 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              + N S AA + + L + +G L S+ P +L + L L+ N L++L WLDSNNLSSIPPAAFRNLSSLA--FLNLQGGQLGSLEPQALLGLENLCHLHLERNQLRSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TVGWRNRSGTATAASQGVCKLVGGAADCRGQSLASV-PSSLPPHARM--LTLDANPLKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRS E G PG+ P PA A + D E+ LP + G L PRSLEGAEPGTPGE--AEGPACPATCACSYDDEVNELSVFCSSRNLTRLPDGIPGGTQAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRSAALEEAGAPGDDAPREPPAPAGAA-ALDMEL--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GLRRLDLSGNALTEDMAALMLQNLSSLRSVSLAGNTIMRLDDSVFEGLERLRELDLQRNY 743
                                                                                           + + + L ELDL+ NQL+ HL L LG L LS N+L +P
VGIEEQSLWGLAELLELDLTSNQLT--HLPHQLFQGLGKLEYLLLSHNRLAELPADALGP
                                                                                                                                                                                                              HFLEELQLGHNRIRQLAERSFEGLGQLEVLTL-DHNQ-----LQEVK-----VGAFLGLT
                                                                                                                                                                                                                                                                                                                              FELETLDLSHNQL--LFFPLLPQYSKLRTLLLRDNNMGFYRDLYNTSSPREMVAQFL-LV 1085
                                                                                                                                                                                                                                                                                                                                                                            IFEIEGGAFDGLAELRHLNLAFNNLPCIVD--F-GLTRLRVLNVSYNVLEWFLATGGEAA 914
I + GAF GL LR L+L+ N + +++ F GL LRVL +S+N + E
IAAVAPGAFLGLKALRWLDLSHNRVAGLLEDTFPGLLGLRVLRLSHNAIASLRPRTFEDL 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLR L L+GN L AL L+ LR + L+ N + + +VF L RL++L L RN GLRELVLAGNRLAYLQPALF-SGLAELRELDLSRNALRAIKANVFAQLPRLQKLYLDRNL 253
                                                                                                                                                                                       + V N++ L E L L L + + + + L L L N L NVAVMNLSGNCLRNLPEQVFRGLGKLHSLHLEGSCLGRIRPHTFAGLSGLRRLFLKDNGL
                                                                                                                                                                                                                                                                                                              LE L L HN++ L
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FIG. 2

BLASTX ALIGNMENT OF SEQ (IDENTIFIED AS LRR PROTEIN-LIKE) Ħ NO: 4 WITH HUMAN GLYCOPROTEIN V PROTEIN SEQ ID NO: LEUCINE-RICH REPEAT PROTEIN-LIKE POLYPEPTIDE

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Sbjct: gi|4758460 ref|NP_004479.1| glycoprotein V (platelet) >sp|P40197|GPV HUMAN PLATELET GLYCOPROTEIN V PRECURSOR (GPV) (CD42D) >pir||A60164 platelet membrane glycoprotein V precursor - human >pir||A47507 platelet membrane glycoprotein V precursor - human emb|CAA80637.1| (Z23091) platelet glycoprotein V precursor [Homo sapiens] >gb|AAA03069.1| (L11238) platelet membrane glycoprotein V [Homo sapiens] (SEQ ID NO: 21)
                                                                                                                                                                                                                                                                                 Query: Leucine-rich repeat-like protein (SEQ ID 4)
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Score = 273 (96.1 bits), Expect = 2.8e-20, Sum P(2) = 2.8e-20
Identities = 127/386 (32%), Positives = 177/386 (45%)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1008
                                                                                                                                               1716 SLRNMGLHSSFMALDFSGFGNLRDLDLSGNCLPIFPR--FGGSLALETLDLRRNSLTALP 1889
                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     837 GLTRIRVINVSYNVLEWFLATGGEA-AFELETIDISHNQLLFFP--LLPQYSKLRTLLLR 1007
                                                                                                                                                                                                                                                                                                     241
                                                                                                    345
                                                                                                                                                                                                   289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D+N R + + + Q L ++ N + SL+ ++L +L+ LD+S N
DHNA--LRGIDQNMFQKLVNLQELALNQNQLDFLPASLF-----TNLENLKLLDLSGNNL 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G+T L+ L +S + + +A G + +L+TL LS N++ P LL + L L L GMTVLQRLMISDSHIS-AVAPGTFSDLIKLKTLRLSRNKITHLPGALLDKMVLLEQLFL- 129
                                                                                                                                                                                                                                               MASIRSISIEGCGIGALPDCPFQGTS-LTYLD--LSSNWGVL-NGSLAPLQDVAPMIQVL 1715
                                                                                                                                                                                                                                                                                                   L +L LS N L +P LF ++ N+T L + N L LP LPNLSSLTLSRNHLAFLPSALFLHSHNLTLLTLFENP--LAELPG-----
                                                                                                                                                                                                                                                                                                                                                   LGSLRLFNLSSNQLLGVPPGLFANARNITTLDMSHNQISLCPLPAASDRVGPPSCVDFRN 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNNMGFYRDLYNTSSPREMVAQFLLVDGNVTNITTVSLWEEFSSSDLADLRFLDMSQNQF 1187
                                                                                                                                                                                                                                                                                                                                                                                                     THLPKGLLGAQAKLERLLLHSNRLVSLDSGLLNSLGALTELQFHRNHIRSI--APGAFDR 240
V L R L + L N + C CG+ GW QH
GD-VFGALPR-LTEVLLGHNSWRCDCGLGPFLGW-LRQH 439
                                               QKAVSEQLSRGLRTIYLSQNPYDC-CGVD---GWGALQH 1994
                                                                                                 ALHSNGLTALPDGL-LRGLGKLRQVSLRRNRLRALPRALFRNLSSLESVQLDHNQLETLP 403
                                                                                                                                                                                                 M L+ L L LP F+ S L YL LS L G+ L + LQVL MGGLQELWLNRTQLRTLPAAAFRNLSRLRYLGVTLSPRLSALPQGAFQGLGE----LQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                   L LH N L++L
                                                                                                                             GGLR + L NL
                                                                                                                                                                                                                                                                                                                                                                                                                                     GALTEL
                                                                                                                                     +LE++ L N L
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Sbjct:

GROWTH FACTOR BINDING PROTEIN SEQ ID NO: BLASTX ALIGNMENT OF SEQ ID NO: 4 (IDENTIFIED AS LRR PROTEIN-LIKE) LEUCINE-RICH REPEAT PROTEIN-LIKE POLYPEPTIDE WITH WD-40 DOMAIN CONTAINING INSULIN-LIKE

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Query: Leucine-rich repeat-like protein (SEQ ID 4) Sbjct: sp|R85888|R85888 WD-40 domain-contg. insulin-lik Length = 605
  Sbjct:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query:
                                                                                                                                                                         1239
                                                                                                                                                                                                                                                                                       1059 EMVAQFLLVDGNVTNITTVSLWEEFSSSDLADLRFLDMSQNQFQYLPDGFLRKMPSLSHL 1238
                                                                                                                                                                                                                                   366
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474 PADALGPLQRAFWLDVSHNRLEALPNSLLAP-LGRLRYLSLRNN-SLRTFTPQPPGLERL 531
                                                                                                                                                                                                                                                                                                                                                                                                        900 GGEAAFELETLDLSHNQL--LFFPLLPQYSKLRTLLLRDNNM-----GFYRDLYNTSSPR 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L++L + P L SL L + L R+ G F+ G L L LG N L+ + AA

133 QLRSLALGTFAHTPALASLGLSNNRLSRLEDGLFEGLGSLWDLNLGWNSLAVLPD---AA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           729 LQRNYIFEIEGGAFDGLAELRHLNLAFNNLPCIVD--F-GLTRLRVLNVSYNVLEWFLAT 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
                                                                                                              NLHQNCLMTLHIREHEPPGALTELDLSHNQLSELHLAPGLASCLGSLRLFNLSSNQLLGV 1418
L N L+ + + L ELDL+ NQL+ HL L LG L LS N+L +
FLKDNGLVGIEEQSLWGLAELLELDLTSNQLT--HLPHRLFQGLGKLEYLLLSRNRLAEL 473
                                                                                                                                                                                                                                                                                                                                               TFKDLHFLEELQLGHNRIRQLAERSFEGLGQLEVLTLDHNQLQEVKAGAFLGLTNVA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FRGLGSLREIVLAGNRLAYLQPALF-SGLAELRELDLSRNALRAIKANVFVQLPRLQKLY 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LHALPGLRRLDLSGNALTEDMAALMLQNLSSLRSVSLAGNTIMRLDDSVFEGLERLRELD 728
                                                      PPGLFANARNITTLDMSHNQISLCPLPAASDRVGPPSCVDFRNMASLRSLSLEGCGLGAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLKTLWNHSLQPYPLLESLSLHSCHLERISRGAFQEQGHLRSLVLGDNCLSENYEETAAA 548
L++L + P L SL L + L R+ G F+ G L L LG N L+ + AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G L + N S AA Q + L G + +G L S+ P +L + L L+ N GTQALWLDGNNLSSVPPAAFQNLSSL--GFLNLQGGQLGSLEPQALLGLENLCHLHLERN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                L RN I + GAF GL LR L+L+ N + +++ F GL LRVL +S+N + LDRNLIAAVAPGAFLGLKALRWLDLSHNRVAGLLEDTFPGLLGLRVLRLSHNAIASLRPR 308
                                                                                                                                                                                                                                 ----VMNLSGNCLR----NLPEQVFRG-LGKLHSLHLEGSCLGRIRPHTFTGLSGLRRL
                                                                                                                                                                                                                                                                                                                                                                                LE L L HN++ L
                            LD+SHN++
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                            RN SLR+ + +
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+
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